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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------|
| 08/984,979  | 12/04/1997  | THOMAS M. BAER       | 485772000400             | 2970             |
| 7590  | 11/02/2004  |                      | EXAMINER<br>NGUYEN, TU T |                  |
| Rimas Lukas<br>465 Kelly Avenu, #E<br>Half Moon Bay, CA 94019 |             |                      | ART UNIT<br>2877         | PAPER NUMBER     |

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                             |  |
|------------------------------|-------------------------------|-----------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>08/984,979 | Applicant(s)<br>BAER ET AL. |  |
|                              | Examiner<br>Tu T. Nguyen      | Art Unit<br>2877            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 and 49-80 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10, 12-25, 27-44, 64-77 and 80 is/are allowed.
- 6) ☒ Claim(s) 49-60, 63, 78 and 79 is/are rejected.
- 7) ☒ Claim(s) 11, 26, 61 and 62 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 11,26,59 are objected to because of the following informalities:

Claims 11,26,59, line 2, the phrase "within 20%" should be changed to "within 20% of a given value".

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 49-60,63,78-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liotta et al (5,843,657).

With respect to claim 49, Liotta discloses a system for LCM. The system comprises: a probe having a substrate surface; and a laser capture microdissection transfer film 6 (fig 2a) coupled to said substrate surface of said probe wherein said probe is adapted to be coupled to a vessel 7 (fig 2c) such that at least a portion of said transfer film 6 (fig 2c) is disposed inside said vessel 7 (fig 2c).

Liotta does not explicitly disclose the claimed transfer film carrier. However, Liotta's probe 5 (fig 2c) is used to carry the transfer film 6 (fig 2c) which performs the same function as the claimed transfer film carrier.

With respect to claim 50, the claimed expanded transfer film would have been obvious because the transfer film need to expand and project itself away from the substrate in order to pick only a wanted tissue.

With respect to claim 52, Liotta does not explicitly disclose a transfer film contains an absorptive substance. However, the claimed limitation would have been obvious because the transfer film is made from a certain material and it would have been obvious that each different material would absorb a certain wavelength.

With respect to claims 51,53-57, the claimed limitations would have been a design choice, since the general conditions of the invention are described by the prior art, modifying the prior art with a scattering media or hot vacuum bake or transparent glue or a negative draft or diffuser involve only routine skill in the art.

With respect to claims 58-60, Liotta does not disclose the thickness or the flatness of the film as claimed. However, it would have been obvious to modify Liotta's transfer film with different thickness or flatness to dissect different type of tissues. The modification involves only routine skill in the art.

With respect to claim 63, refer to discussion in claim 49 above for the transfer film carrier. The claimed microcentrifuge tube would have been known. It would have

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been obvious to substitute Liotta's vessel 7 (fig 2c) with the known microcentrifuge tube to perform different testing types.

With respect to claim 78-79, it would have been obvious to modify Liotta's vessel with a sealing feature or an internal ridge as claimed for providing a better control of the sample.

***Allowable Subject Matter***

Claims 1-44,64-77,80 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: prior arts of record do not disclose an apparatus comprising: a laser capture microdissection transfer film coupled to a substrate surface of a transfer film carrier, said laser capture microdissection transfer film including at least one integrally formed structural feature that protrudes and provides a controllable spacing between said laser capture microdissection transfer film and a sample which structurally arranged and functionally operated as claimed in claims 1,15,16,30,31,44.

Prior arts of record do not disclose a LCM assembly comprising: a plate having a top surface, and at least one laser capture microdissection cap coupled to said top surface of said plate as claimed in claims 64,77.

Claims 61-62 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior arts of record do not disclose the transfer film as claimed in claims 61-62.

*Response to Amendment*

Receipt of amendment letter on 05/20/2003 is acknowledged. **Applicant's arguments filed 05/30/2003 have been fully considered but they are not persuasive.** The Examiner's response to applicant's argument is detailed below.

With respect to Applicant's argument for claims 49-60,63,78-79, refer to discussion above.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for modifying Liotta's system with the limitations as claimed in claims 50-57 can be found in the knowledge generally available to one of ordinary skill in the art.

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**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T. Nguyen whose telephone number is (571) 272-2424. The examiner can normally be reached on T-F 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley Jr. can be reached on (571) 272-2800 Ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu T. Nguyen  
Primary Examiner  
Art Unit 2877

10/27/2004